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| APPLICATION NO. | FILING DATE | FIRST NAMED INVENTOR | ATTORNEY DOCKET NO. | CONFIRMATION NO. |
|---|-------------|----------------------|---------------------|------------------|
| 10/790,878 | 03/03/2004 | Hisamitsu Takagi | 1442.1019 | 4744 |
| 21171 | 7590 | 06/29/2005 | EXAMINER | |
| STAAS & HALSEY LLP SUITE 700 1201 NEW YORK AVENUE, N.W. WASHINGTON, DC 20005 | | | CAO, HUEDUNG X | |
| | | | ART UNIT | PAPER NUMBER |
| | | | 2821 | |

DATE MAILED: 06/29/2005

Please find below and/or attached an Office communication concerning this application or proceeding.

Office Action Summary

Application No.

10/790,878

Applicant(s)

TAKAGI, HISAMITSU

Examiner

Huedung X. Cao

Art Unit

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-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --
Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If the period for reply specified above is less than thirty (30) days, a reply within the statutory minimum of thirty (30) days will be considered timely.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

Status

- 1) ☒ Responsive to communication(s) filed on 03 March 2004.
- 2a) ☐ This action is **FINAL**. 2b) ☒ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

Disposition of Claims

- 4) ☒ Claim(s) 1-17 is/are pending in the application.
- 4a) Of the above claim(s) _____ is/are withdrawn from consideration.
- 5) ☐ Claim(s) _____ is/are allowed.
- 6) ☒ Claim(s) 1-17 is/are rejected.
- 7) ☐ Claim(s) _____ is/are objected to.
- 8) ☐ Claim(s) _____ are subject to restriction and/or election requirement.

Application Papers

- 9) ☐ The specification is objected to by the Examiner.
- 10) ☒ The drawing(s) filed on _____ is/are: a) ☐ accepted or b) ☒ objected to by the Examiner.
Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).
Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
- 11) ☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

Priority under 35 U.S.C. § 119

- 12) ☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) ☐ All b) ☐ Some * c) ☐ None of:
- ☐ Certified copies of the priority documents have been received.
 - ☐ Certified copies of the priority documents have been received in Application No. _____.
 - ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

* See the attached detailed Office action for a list of the certified copies not received.

Attachment(s)

- | | |
|--|---|
| 1) <input checked="" type="checkbox"/> Notice of References Cited (PTO-892) | 4) <input type="checkbox"/> Interview Summary (PTO-413) Paper No(s)/Mail Date. _____ |
| 2) <input type="checkbox"/> Notice of Draftsperson's Patent Drawing Review (PTO-948) | 5) <input type="checkbox"/> Notice of Informal Patent Application (PTO-152) |
| 3) <input checked="" type="checkbox"/> Information Disclosure Statement(s) (PTO-1449 or PTO/SB/08) Paper No(s)/Mail Date <u>12/30/04, 03/03/04, 6/12/05</u> | 6) <input type="checkbox"/> Other: _____ |

DETAILED ACTION

Claim Rejections - 35 USC § 103

1. The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

(a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negated by the manner in which the invention was made.

2. Claims 1-17 are rejected under 35 U.S.C. 103(a) as being unpatentable over Kobayashi (US 2002/0173281 A1).

As per claim 1, Kobayashi teaches the claimed mobile radio communication apparatus comprising.

a first housing (Kobayashi, figure 1, first housing 11);

a second housing foldable over said first housing (Kobayashi, figure 1, second housing 12); and

a hinge part that foldably connects said second housing to said first housing around a rotational center axis (Kobayashi, figure 1, hinge portion 16, and paragraph [0041], lines 1-5), wherein said hinge part includes:

a one touch opening part that automatically opens said second housing from a folded state by a first angle relative to said first housing around the rotational center axis in a non-stop motion (Kobayashi, figure 1, an operating portion 16, and paragraphs [0012], [0045], [0047]);

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an auxiliary rotational part that rotates said second housing around an orthogonal shaft orthogonal to the rotational center axis of said hinge part (Kobayashi, paragraph [0045]); and

an opening permission section that allows said second housing to open (Kobayashi, paragraph [0048]) at an angle greater than the first angle relative to said first housing which Kobayashi does not explicitly disclose. However, at paragraph [0048] Kobayashi's responsive to an operation of the operating portion, the second housing 12 rotates from the first angle position to the second angle position that implies Applicant's second housing to open at an angle greater than the first angle relative to said first housing. It would have been obvious to one of ordinary skill in the art at the time the invention was made to have second housing to open at an angle greater than the first angle relative to said first housing doing so it would provide the flexibility for the user while using the phone.

Claim 2 adds into claim 1, wherein said opening permission section allows said second housing to open at an angle greater than the first angle relative to said first housing, when a rotation moment applied to said second housing in an opening direction is equal to or greater than a predetermined rotation moment (Kobayashi, paragraph [0044]).

Claim 3 adds into claim 1, wherein said opening permission section does not allow said second housing to open at an angle greater than the first angle relative to said first housing, when a rotation moment applied to said second housing in an

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opening direction is smaller than a predetermined rotation moment (Kobayashi, paragraph [0044]).

Claim 4 adds into claim 1, wherein said opening permission section resets an angle between said first and second housings to the first angle, when a rotation moment applied to said second housing in an opening direction changes from a value equal to or greater than a predetermined rotation moment to a value smaller than the predetermined rotation moment (Kobayashi, paragraph [0044]).

Claim 5 adds into claim 1, wherein when said opening permission section allows opening, only said second housing rotates relative to said first housing by the angle greater than the first angle (Kobayashi, paragraph [0044]).

Claim 6 adds into claim 1, wherein claim 1, wherein when said opening permission section allows opening, both said second housing and said hinge part rotate relative to said first housing by the angle greater than the first angle (Kobayashi, paragraph [0044]).

Claim 7 adds into claim 1, wherein said opening permission section is a stopper provided on said first housing, said stopper supporting a rear surface of said second housing (Kobayashi, paragraph [0044], stopping portion 42g).

Claim 8 adds into claim 1, wherein the stopper elastically deforms, and allows said second housing to open at an angle greater than the first angle relative to said first housing (Kobayashi, paragraph [0044], stopping portion 42g).

Claim 9 adds into claim 1, wherein the stopper rotates around a rotational axis parallel to the rotational center axis, and allows said second housing to open at an

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angle greater than the first angle relative to said first housing (Kobayashi, paragraph [0045]).

Claim 10 adds into claim 1, wherein said opening permission section includes a cam member provided on said hinge part (Kobayashi, paragraph [0055], lines 1-7).

Claim 11 adds into claim 10, wherein said cam member is one of a ball cam and an angled cam (Kobayashi, paragraph [0054], sharp 35).

Claim 12 adds into claim 1, wherein said hinge part includes a free stop part that maintains said second housing at a second angle different from the first angle relative to said first housing (Kobayashi, paragraph [0074]).

Claim 13 adds into claim 1, wherein said free stop part does not work while said second housing that has been opened by said one touch opening part is being folded (Kobayashi, paragraph [0078]).

Claim 14 adds into claim 9, wherein said free stop part works while said second housing that has been opened by said one touch opening part is being folded (Kobayashi, paragraph [0074]).

Claim 15 adds into claim 1, wherein said hinge part further includes a damper part that brakes an opening action of said second housing by said one touch opening part (Kobayashi, paragraph [0055]).

Claim 16 adds into claim 15, wherein said damper part brakes said second housing when said second housing forms a third angle or larger relative to said first housing (Kobayashi, paragraph [0055]).

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3. Claim 17 is rejected under 35 U.S.C. 103(a) as being unpatentable over Kobayashi (US 2002/0173281 A1).

As per claim 17, Kobayashi teaches the claimed “a hinge part that foldably connects a first housing, said hinge part” comprising.

a one touch opening part that automatically opens said second housing from a folded state by a first angle relative to said first housing around the rotational center axis in a non-stop motion (Kobayashi, figure 1, an operating portion 16, and paragraphs [0012], [0047]);

an auxiliary rotational part that rotates said second housing around an orthogonal shaft orthogonal to the rotational center axis of said hinge part (Kobayashi, paragraph [0045]); and

an opening permission section that allows said second housing to open (Kobayashi, paragraph [0048]) at an angle greater than the first angle relative to said first housing which Kobayashi does not explicitly disclose. However, at paragraph [0048] Kobayashi’s responsive to an operation of the operating portion, the second housing 12 rotates from the first angle position to the second angle position that implies Applicant’s second housing to open at an angle greater than the first angle relative to said first housing. It would have been obvious to one of ordinary skill in the art at the time the invention was made to have second housing to open at an angle greater than the first angle relative to said first housing doing so it would provide the flexibility for the user while using the phone.

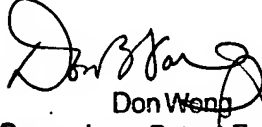
Inquires

4. Any inquiry concerning this communication or earlier communications from the examiner should be directed to Huedung Cao whose telephone number is (571) 272-1939.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Don Wong, can be reached on (571) 272-1834. The fax phone number for the organization where this application or proceeding is assigned is 703-872-9306.

5. Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see <http://pair-direct.uspto.gov>. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free).

Huedung Cao
Patent Examiner


Don Wong
Supervisory Patent Examiner
Technology Center 2800